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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/712,970	11/16/2000	Yutaka Nagai	500.37136CX1	5631

20457 7590 12/18/2002

ANTONELLI TERRY STOUT AND KRAUS
SUITE 1800
1300 NORTH SEVENTEENTH STREET
ARLINGTON, VA 22209

EXAMINER
ROSEN, NICHOLAS D

ART UNIT	PAPER NUMBER
3625	

DATE MAILED: 12/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/712,970	NAGAI ET AL.	
	Examiner	Art Unit	
	Nicholas D. Rosen	3625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 November 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 November 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. *09/290,251* .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Claims 1-14 have been examined.

Drawings

The drawings submitted November 16, 2000, have been approved by the examiner and by the draftsperson.

Specification

The disclosure is objected to because of the following informalities: On page 12, line 28, "I11" occurs in place of "111".

Appropriate correction is required.

Claim Objections

Claims 1-5 are objected to because of the following informalities: In the eighth line of claim 1 (line 9 on page 15), "then modulated" should be "then been modulated". Appropriate correction is required.

Claims 3 and 4 are objected to because of the following informalities: In the fifth line of claim 3 (line 9 on page 16), the word "respectively" appears to be unnecessary and without meaning in context. Appropriate correction is required.

Claim 6 is objected to because of the following informalities: In the eighth line of claim 6 (line 28 on page 16), "then modulated" should be "then been modulated". Appropriate correction is required.

Claims 7-11 are objected to because of the following informalities: In the eighth line of claim 7 (line 4 on page 18), "then modulated" should be "then been modulated". In the fifteenth line of claim 7 (line 11 on page 18), "an error-corrector which for error-corrects" should be "an error-corrector which error-corrects". In the nineteenth line of claim 7 (line 15 on page 18), "a reproducer which for reproduces" should be "a reproducer which reproduces". Appropriate correction is required.

Claims 9 and 10 are objected to because of the following informalities: In the fifth line of claim 9 (line 3 on page 19), the word "respectively" appears to be unnecessary and without meaning in context. Appropriate correction is required.

Claim 12 is objected to because of the following informalities: In the eighth line of claim 12 (line 22 on page 19), "then modulated" should be "then been modulated". . Appropriate correction is required.

Claim 13 is objected to because of the following informalities: In the sixth line of claim 13 (line 23 on page 20), "has being undergone" should be "has undergone". In the seventh line of claim 13 (line 24 on page 20), "then modulated" should be "then been modulated". In the twelfth line of claim 13 (line 1 on page 21), "an error-corrector which for error-corrects" should be "an error-corrector which error-corrects". In the fourteenth line of claim 13 (line 3 on page 21), "a reproducer which for reproduces" should be "a reproducer which reproduces". Appropriate correction is required.

Claim 14 is objected to because of the following informalities: In the sixth line of claim 14 (line 28 on page 21), "has being undergone" should be "has undergone". In

the seventh line of claim 14 (line 1 on page 22), "then modulated" should be "then been modulated". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 recites the limitations "said copying consent information reproducer, said demodulator, said error-corrector" in the second, third, and fourth lines of claim 11 (lines 10-12 on page 19). There is insufficient antecedent basis for this limitation in the claim.

This antecedent basis problem would be corrected if claim 11 depended on claim 8 instead of claim 2, which examiner believes to have been applicant's intention. Therefore, for examination purposes, claim 11 will be treated as depending on claim 8.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-5

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tozaki et al. (U.S. Patent 5,729,516) in view of Suzuki et al. (U.S. Patent 5,699,474). Tozaki discloses a reproduction apparatus for reproducing video data and/or audio data from a medium dedicated to reproduction and/or a recordable medium having video data and/or audio data recorded thereon, said video data and/or audio data being generated by superimposing information concerning copying consent on a digitized video signal or audio signal (Abstract; see also column 1, lines 38-48), said reproduction apparatus comprising: reproducing means for reproducing the superimposed information concerning copying consent from the processed data (column 18, lines 12-41); and output control means for performing output control of the reproduced data based on said reproduced information concerning copying consent (column 18, line 42, through column 19, line 42). Tozaki does not disclose the other elements of claim 1; however,

Suzuki teaches demodulating means for demodulating data modulated in accordance with a presumed modulation rule; temporal store means for holding the data demodulated by the demodulating means; and error-correcting means for error-correcting the demodulated data stored in a temporal store means, the error-corrected data being stored in a temporal store means (column 9, lines 43-50; refer also to Figure 5). Hence, it would have been obvious to one of ordinary skill in the art of data reproduction and copy protection at the time of applicant's invention to include demodulating means for the obvious advantage of transforming the data into convenient (digital) form; error-correcting means for the obvious advantage of correcting data errors; and temporal store means for the obvious advantage of manipulating data for demodulation, error-correction, copying consent checking, etc.

Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tozaki and Suzuki as applied to claim 1 above, and further in view of official notice. As per claim 2, neither Tozaki not Suzuki expressly discloses that said temporal store means is a RAM, but official notice is taken that the use of RAM to store data, especially to store data temporarily, is well known. Hence, it would have been obvious to one of ordinary skill in the art of data reproduction and copy protection at the time of applicant's invention to have the temporal store means be a RAM, for the obvious advantage of temporally storing the data in a convenient, widely available, and re-usable type of memory.

As per claim 3, neither Tozaki nor Suzuki discloses that the demodulating means, the error-correcting means, and the copying consent information reproduction

means are connected to said RAM, but official notice is taken that it is well known to have data processing means connected to a RAM. Hence, it would have been obvious to one of ordinary skill in the art of data reproduction and copy protection at the time of applicant's invention to have the demodulating means, the error-correcting means, and the copying consent information reproduction means be connected to said RAM, for the obvious advantage of enabling the various data processing means read from and write to the RAM in order to carry out their functions with regard to the data.

As per claim 4, neither Tozaki nor Suzuki discloses that said RAM is constituted by a single RAM, but official notice is taken that it is well known for a RAM to be constituted by a single RAM (e.g., one disk). Hence, it would have been obvious to one of ordinary skill in the art of data reproduction and copy protection at the time of applicant's invention to have the RAM be constituted by a single RAM, for the obvious advantages of economizing on RAM's and enabling the data processing to be conducted in a simple and convenient manner.

As per claim 5, neither Tozaki nor Suzuki discloses that the copying consent information reproducing means, the demodulating means, the error-correcting means, and the RAM are integrated in a single semiconductor device, but official notice is taken that it is well known to integrate a multiplicity of data processors and memory into a single semiconductor device (as witness the terms "integrated circuit" and "computer on a chip"). Hence, it would have been obvious to one of ordinary skill in the art of data reproduction and copy protection at the time of applicant's invention to have the copying consent information reproducing means, the demodulating means, the error-correcting

means, and the RAM integrated in a single semiconductor device, for the obvious advantages of simplifying chip manufacture, not needing to connect a number of chips to one another, increased processing speed (since signals would not have to be sent from one chip to another), and enhanced security, in that signals within a single chip cannot be as readily detected and falsified as signals between separate chips or other arrangements of circuit elements.

Claim 6

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tozaki et al. (U.S. Patent 5,729,516) in view of Suzuki et al. (U.S. Patent 5,699,474) and official notice. Tozaki discloses a reproduction apparatus for reproducing video data and/or audio data from a medium dedicated to reproduction and/or a recordable medium having video data and/or audio data recorded thereon, said video data and/or audio data being generated by superimposing information concerning copying consent on a digitized video signal or audio signal (Abstract; see also column 1, lines 38-48), said reproduction apparatus comprising: reproducing means for reproducing the superimposed information concerning copying consent from the processed data (column 18, lines 12-41); and means for stopping reproduction of the video data and/or audio data in accordance with the information concerning copying consent from said copying consent information reproducing means (column 21, lines 14-22). Tozaki does not disclose the other elements of claim 1; however, Suzuki teaches demodulating means for demodulating data modulated in accordance with a presumed modulation rule; temporal store means for holding the data demodulated by the demodulating

means; and error-correcting means for error-correcting the demodulated data stored in a temporal store means, the error-corrected data being stored in a temporal store means (column 9, lines 43-50; refer also to Figure 5). Hence, it would have been obvious to one of ordinary skill in the art of data reproduction and copy protection at the time of applicant's invention to include demodulating means for the obvious advantage of transforming the data into convenient (digital) form; error-correcting means for the obvious advantage of correcting data errors; and temporal store means for the obvious advantage of manipulating data for demodulation, error-correction, copying consent checking, etc.

Neither Tozaki nor Suzuki discloses that the demodulating means, the temporal store means, the error-correcting means, the copying consent information reproducing means, and the reproduction stopping means are integrated in a single semiconductor device. However, official notice is taken that it is well known to integrate a multiplicity of data processors and memory into a single semiconductor device (as witness the terms "integrated circuit" and "computer on a chip"). Hence, it would have been obvious to one of ordinary skill in the art of data reproduction and copy protection at the time of applicant's invention to have the demodulating means, the temporal store means, the error-correcting means, the copying consent information reproducing means and the reproduction stopping means integrated in a single semiconductor device, for the obvious advantages of simplifying chip manufacture, not needing to connect a number of chips to one another, increased processing speed (since signals would not have to be sent from one chip to another), and enhanced security, in that signals within a single

chip cannot be as readily detected and falsified as signals between separate chips or other arrangements of circuit elements.

Claims 7-11

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tozaki et al. (U.S. Patent 5,729,516) in view of Suzuki et al. (U.S. Patent 5,699,474). Claim 7 is closely parallel to claim 1, and rejected on essentially the same grounds set forth above with regard to claim 1.

Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tozaki and Suzuki as applied to claim 7 above, and further in view of official notice. Claims 8-11 are closely parallel to claims 2-5, respectively, and rejected on essentially the same grounds set forth above with regard to claims 2-5.

Claim 12

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tozaki et al. (U.S. Patent 5,729,516) in view of Suzuki et al. (U.S. Patent 5,699,474) and official notice. Claim 12 is closely parallel to claim 6, and rejected on essentially the same grounds set forth above with regard to claim 6.

Claim 13 and 14

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tozaki et al. (U.S. Patent 5,729,516) in view of Suzuki et al. (U.S. Patent

5,699,474). Claims 13 and 14 are closely parallel to claim 1, and rejected on essentially the same grounds set forth above with regard to claim 1.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Copeland et al. (U.S. Patent 5,659,613) disclose a method and apparatus for copy protection for various recording media using a video fingerprint. Yamagata et al. (U.S. Patent 5,715,357) disclose a reproducing apparatus (with particular mention of a RAM). Linnartz (U.S. Patent 6,209,092) discloses a method and system for transferring content information and supplemental information relating thereto. Ueda et al. (U.S. Patent 6,289,102) disclose an apparatus and method for preventing unauthorized use of information recorded on an information recording medium (with particular mention of a RAM). Callway et al. (U.S. Patent 6,356,704) disclose a method and apparatus for detecting protection of audio and video signals. Ryan et al. (U.S. Patent 6,374,036) disclose a method and apparatus for copy-once watermark for video recording. Sugiyama et al. (U.S. Patent 6,437,933) disclose a recording medium for protecting copyrighted data. Ogino (U.S. Patent Application Publication 2001/0046101) discloses an information signal output control method, information signal duplication prevention method, information signal duplication prevention device, and information signal recording medium. Blumenthal et al. (U.S. Patent Application Publication 2002/0007347) disclose a secured electronic information delivery system having a metering device. Sugahara (U.S. Patent Application

Publication 2002/0037039) discloses a method of protection of data reproduction, and reproduction apparatus providing protection of data reproduction.

The Microsoft Press Computer Dictionary, third edition, page 255, discloses a definition of integrated circuit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas D. Rosen, whose telephone number is 703-305-0753. The examiner can normally be reached on 8:30 AM - 5:00 PM, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wynn Coggins, can be reached on 703-308-1344. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and for After Final communications. Non-official/draft communications can be faxed to the examiner at 703-746-5574.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Nicholas D. Rosen
Nicholas D. Rosen
December 13, 2002